

# **NEURAL FUSION: Multispectral & Multisensor Image Fusion & Mining**

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## **ABSTRACT**

I will summarize our methods for the fusion of multispectral and multisensor imagery based on concepts derived from neural models of visual processing and pattern learning & recognition. These methods have been applied to real-time fusion of night vision sensors in the field, airborne multispectral and hyperspectral imaging systems, and space-based multi-platform multi-modality imaging sensors. The methods enable color fused 3D visualization, as well as interactive exploitation and data mining in the form of human-guided machine learning & search for targets and cultural features. A live demonstration will also be given at the poster session.

**Session:** This presentation was invited by Dr. Stephen Brumby of Los Alamos National Laboratory, for his session on New Analytical & Computational Techniques. If time and schedule permit, I'd be happy to provide a live demonstration at the poster session.